The Basics & Beyond of Europe's High-End Research Funding

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AGENDA

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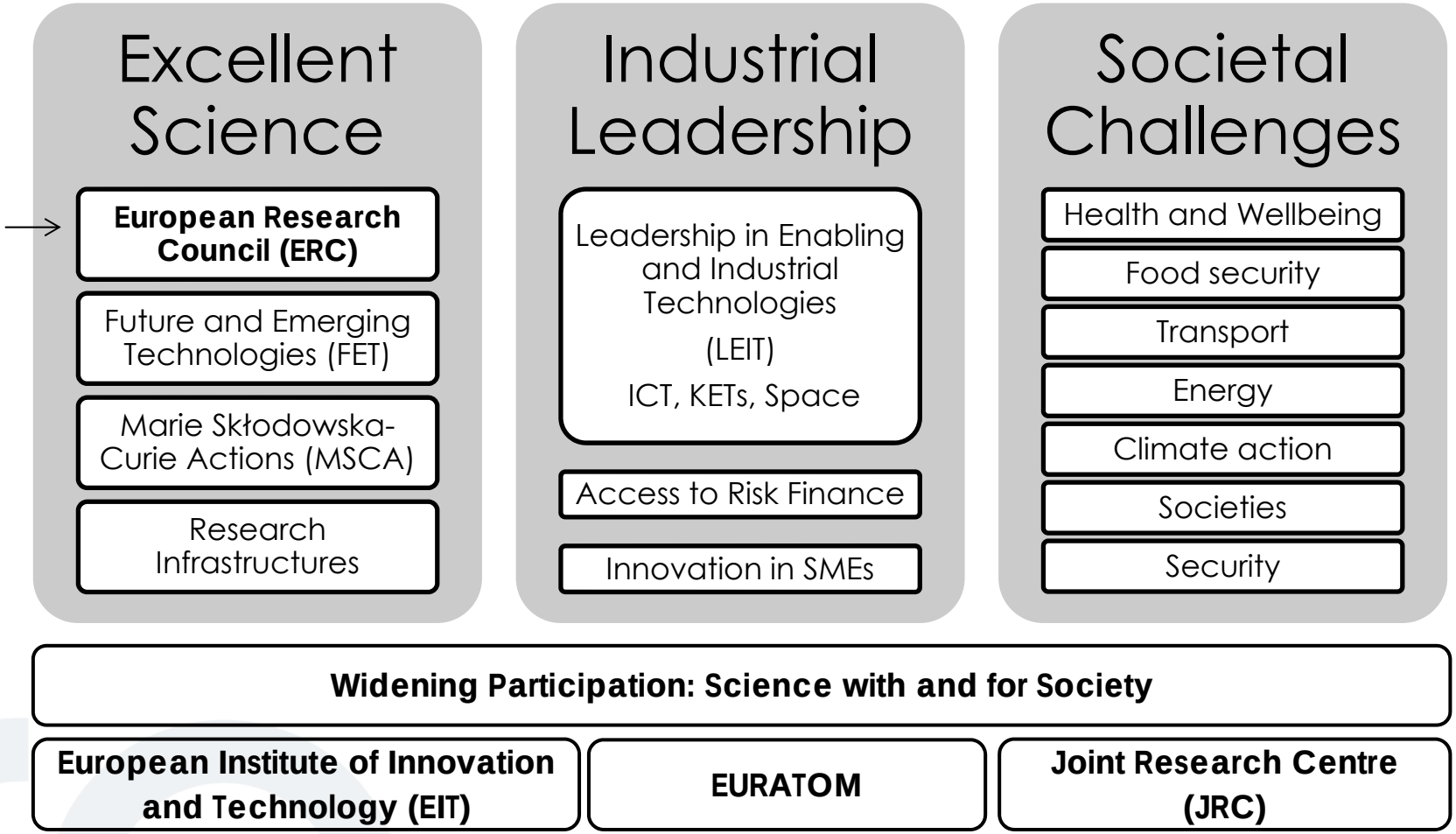
- **Context**
  - Horizon 2020
  - ERC Basics
- **ERC Workflow framework**
- **PI Selection**
  - Candidates' Profile
  - Eligibility Criteria
  - PI's Commitment
  - Collaborators
  - Training
- **Scientific Excellence**
  - What is Excellence?
  - What is the nature of ERC project?
  - Proposal writing
  - Panel selection
  - Training
- **Technical and Administrative**
  - Application & submission processes
  - Budget & Ethical Issues
  - Common mistakes
  - The evaluation 'black box'
- **Interview preparation**

H2020 STRUCTURE



H2020 FUNDING CHANNELS

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ERC

FET Open

Fast Track to Innovation

SME Instrument

Top-Bottom Themes - RIA / IA

Basic Research → Market

1	2	3	4	5	6	7	8	9
Basic principles	Technology concept	Experimental proof of concept	Technology validated in lab	Technology validated in relevant environment	Technology demonstrated	System prototype	System complete and qualified	Actual system proven in operational environment

Technology Readiness Level (TRL)

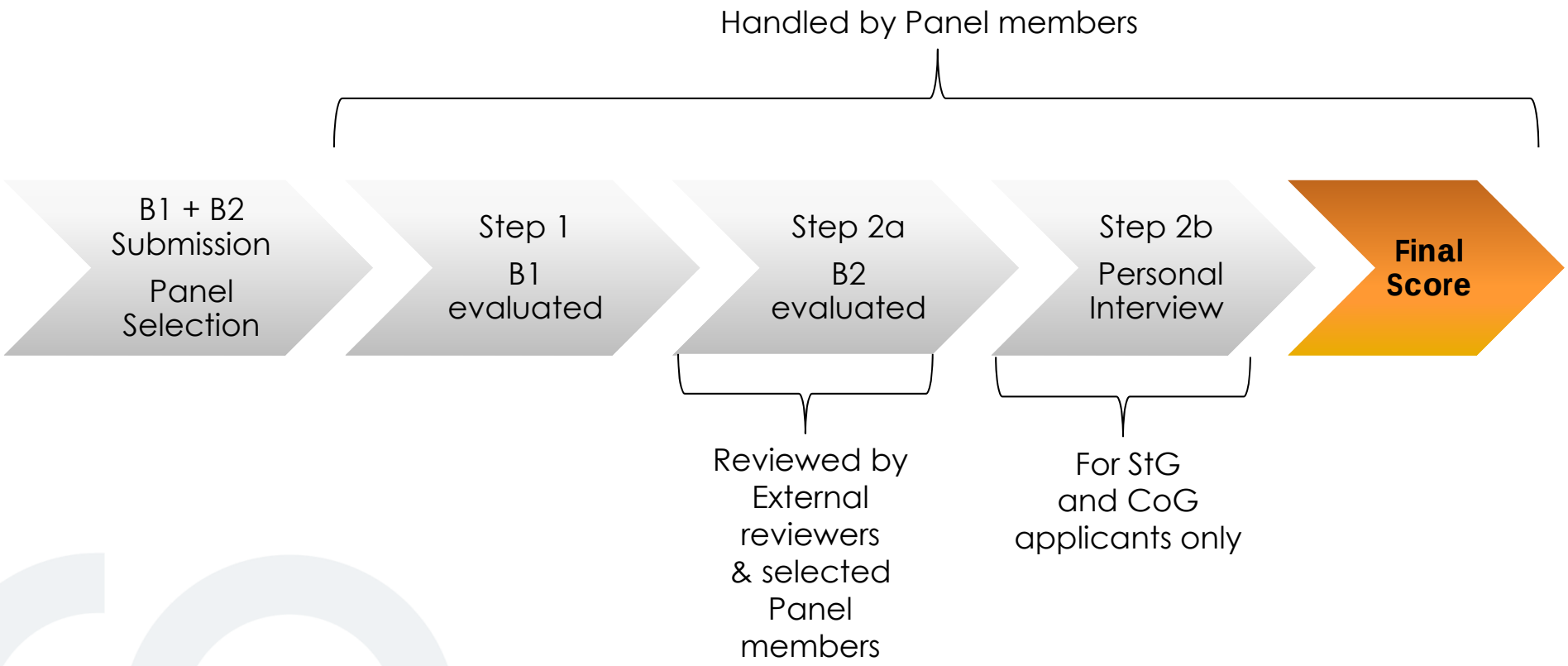
ERC BASICS

- A personal grant
- Investigator-driven – independent & creative PI

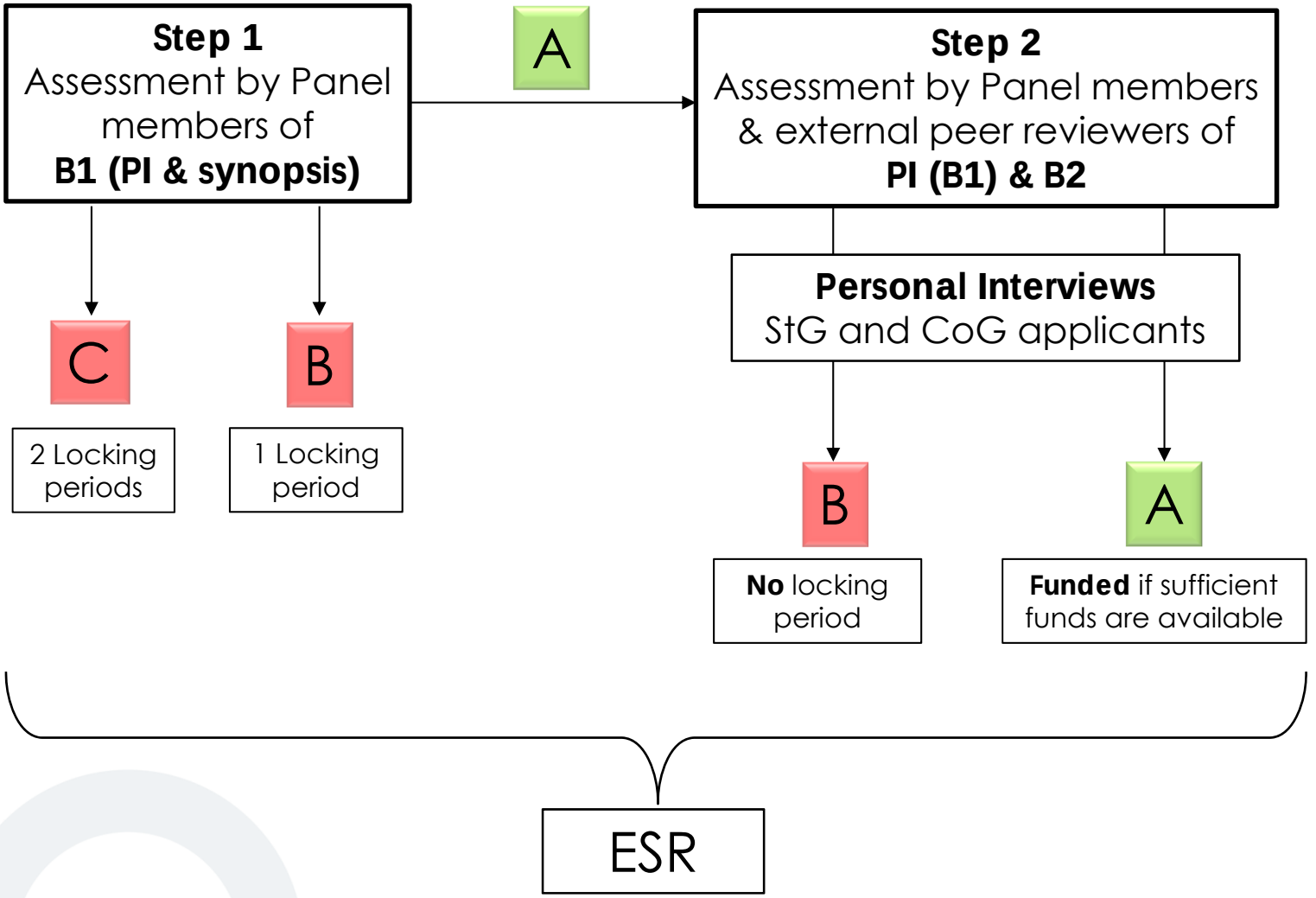
- Pioneering ideas – go beyond existing knowledge
- Basic research – High risk
- Impact – High gain – make EU research stronger and more visible
- No thematic priorities – anything goes

- Sole evaluation criteria - **Excellence**

Single Submission – Two-step Evaluation



ERC BASICS



ERC WORKFLOW

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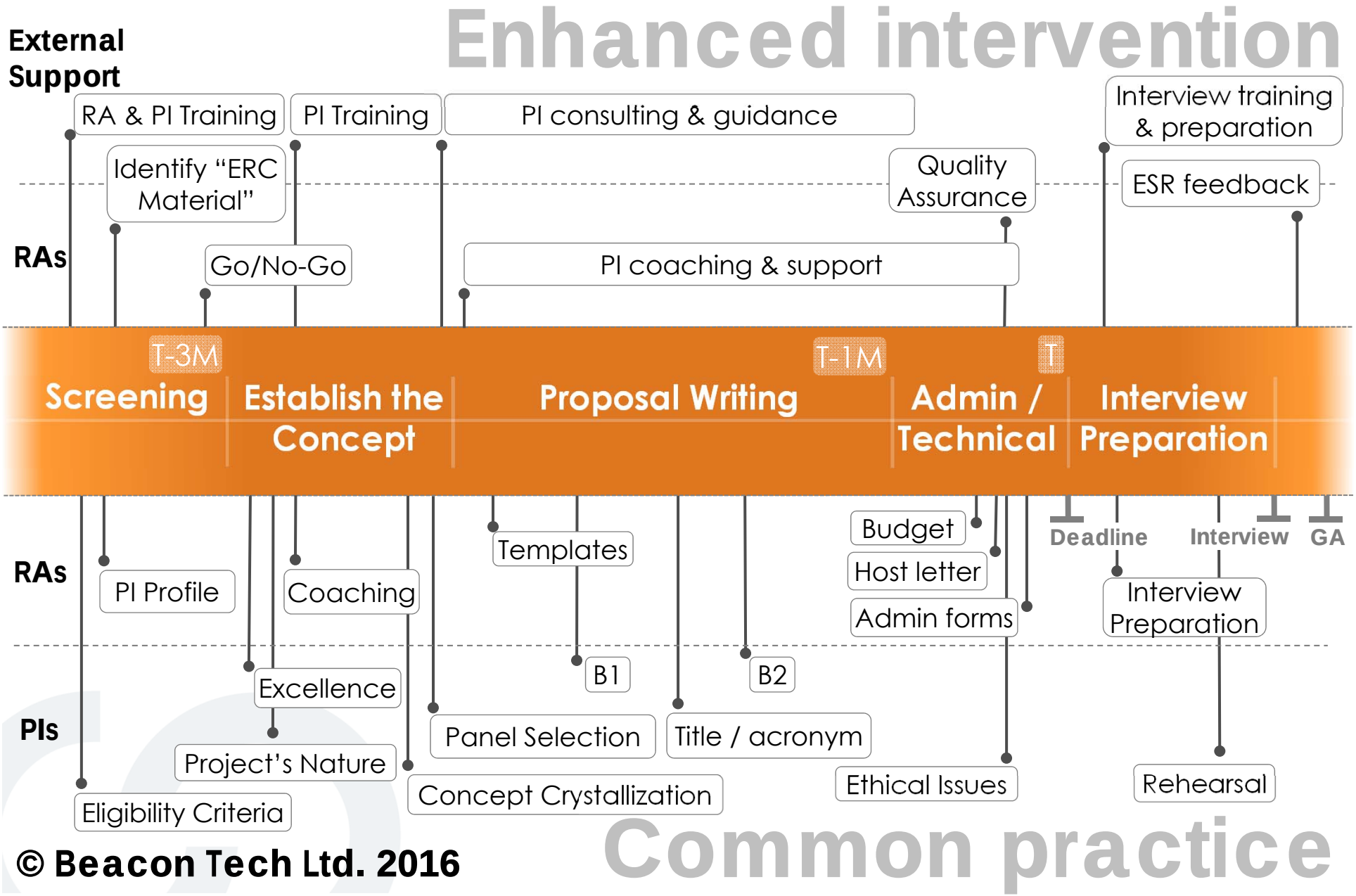

ERC WORKFLOW

ERC ELIGIBILITY CRITERIA

- Independent researchers from ALL nationalities can apply
- Host institution must be in an EU Member State / Associated Country
- Private for-profit research centers are eligible as Host institutions
- ERC grants are personal and portable within the EU

ERC CATEGORIES

STARTING (StG)

2 ≤ PhD ≤ 7 years (prior to 1/1/2017)

- Budget (€): 1.5M + 0.5M*
- Duration: up to 5 years
- Commitment: min. 50%
- Deadline: 18-10-2016 (tentative)

Cut-off dates:
PhD awarded from 1 January 2010
to 1 January 2015 (inclusive)

CONSOLIDATOR (CoG)

7 < PhD ≤ 12 years (prior to 1/1/2017)

- Budget (€): 2M + 0.75M*
- Duration: up to 5 years
- Commitment: min. 40%
- Deadline: 9-2-2017 (tentative)

Cut-off dates:
PhD awarded from 1 January 2005
to 31 December 2009 (inclusive)

ADVANCED (AdG)

Significant last 10 years track record

- Budget (€): 2.5M + 1M*
- Duration: up to 5 years
- Commitment: min. 30%
- Deadline: 1-9-2016 (next round- 31/8/2017, tentative)

*Justified purchase of major equipment / access to large-scale research infrastructures / relocation costs

ERC ELIGIBILITY WINDOW

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Career Breaks (extension of eligibility window)

- Maternity leave - 18 months / child
- Paternity leave - actual documented leave
- Long-term illness, clinical training or national service – as documented

MD/PhD (unlike PhD/MD)

- Eligibility window – according to the earliest degree date
- StG → 4-9 years past MD degree
- CoG → 9-14 years past MD degree

ERC ELIGIBILITY PRACTICE

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- Calculate the eligibility *window correctly*
  - Check the diploma award date
  - Career breaks (maternity/parental leave, clinical training, etc.)
- Category margins - When to apply ?
  - Use career breaks to change categories? (AdG→CoG→StG)
  - Late StG – early CoG / Late CoG – early AdG
  - Don't misuse
- Blocking is personal
  - Restrictions on submission due to score B or C in Step 1 in previous submission
  - "Can I submit a different proposal this year instead?"

PI TIME DEDICATION

	Min. % Time dedicated to ERC project	% Recommended	Min. % Presence in an EU Member State /Associated Country
StG	50%	**>60%**	50%
CoG	40%	**>50%**	50%
AdG	30%	**30-45%**	50%

PI PROFILE - WHO IS "ERC MATERIAL"?

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- Creative thinkers – able to create paradigm shifts
- Outstanding CV & high-impact publications
- Proven leadership and independence
- Basic-research oriented
  - Rather than industry or teaching
  - Clinicians & Engineers – the "applicative thinkers" problem
- Timing (career-wise)

PI PROFILE

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Competitiveness in EU research arena

StG	*CoG*	*AdG*
At least 1 high-impact publication w/o PhD supervisor	Several high-impact publications, ascending trend of publications & citations	Active 10 years track record – Fresh high-impact publications

h-index "vulnerability"

International visibility

StG	*CoG*	*AdG*
Post-doc/position in a different country	Recognized internationally	Recognized internationally

PI PROFILE

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Non-incremental work

StG	*CoG*	*AdG*
Proving independent thinking: Showing progress from PhD/ Postdoc	Critical	Critical Common issue

Funding ID

StG	*CoG*	*AdG*
Not mandatory, dependent on time point	Critical	Critical

Interdisciplinarity

Encouraged when well justified, not a must

PI PROFILE

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Career/Discipline shift

StG	*CoG*	*AdG*
Possible if research benefits from the interdisciplinarity	If research benefits from the interdisciplinarity, <u>and</u> supported by publications	Less probable

Leading a research team

StG	*CoG*	*AdG*
Not mandatory, could be an advantage	Critical	Critical

Mentoring new scientists

StG	*CoG*	*AdG*
Not mandatory, could be an advantage	Critical	Critical

PI PROFILE

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Point in time, career-wise

StG	*CoG*	*AdG*
Is it too early? / Transition to CoG	Publication status Personal considerations Transition to AdG	Publication status Personal considerations

Point in time, concept-wise

<u>Strike the iron while it's hot</u>

- Ahead of the competition?
- Will it be too late next year?
- Convincing preliminary findings
- Is it mature enough?
- Pending publications

'WHY ME, WHY NOW?'

ESR KEY CRITICISM - PI

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- ''The PI has not yet achieved a sufficiently strong publication record''
- ''The PI has little experience in training and advancement of young scientists''
- ''The PI's achievements do not typically go beyond the state of the art''
- ''It is not clear if the PI has enough experience to carry out this project''

What to do…

- ✓ Clarify that you, as a PI, are in the best position to carry out this project
- ✓ Highlight your key achievements in the proposal text – publications, invited talks, conferences, young researcher supervision, etc.
- ✓ Use references to show your track record
- ✓ Describe relevant unpublished findings – preliminary research
- ✓ Provide evidence of international visibility in the field
- ✓ Consider waiting…

COLLABORATORS

- Focus is on the PI - this is not a collaborative project
- No Co-PI
- Present your team members - expertise / multidisciplinarity
- If collaborator/s are needed -
  - Specifically identified expertise with added value
  - Not core research
  - Identify by name
  - Internal or External – from anywhere in the world
  - Budgeted as needed

ERC FOR SH RESEARCHERS? – YES!

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"I can't compete with life / exact sciences"

– You don't. There is a dedicated budget for SH, and the application is evaluated by scholars from <u>your</u> research domain

"What is considered 'high risk' research in SH disciplines?"

– A first attempt at proving a novel hypothesis

  • Suggesting A new theoretical framework to an open/unsolved question in your research field

  • Challenging a common approach by suggesting a paradigm shift

– More feasibility is expected in SH compared to other domains

What to do…

➢ Targeted identification of potential SH researchers, awareness-raising and coaching of promising SH researchers

➢ Concept crystallisation at an early stage

➢ Support SH researchers with rejected ERC grants to resubmit

RA ERC TRAINING & AWARENESS

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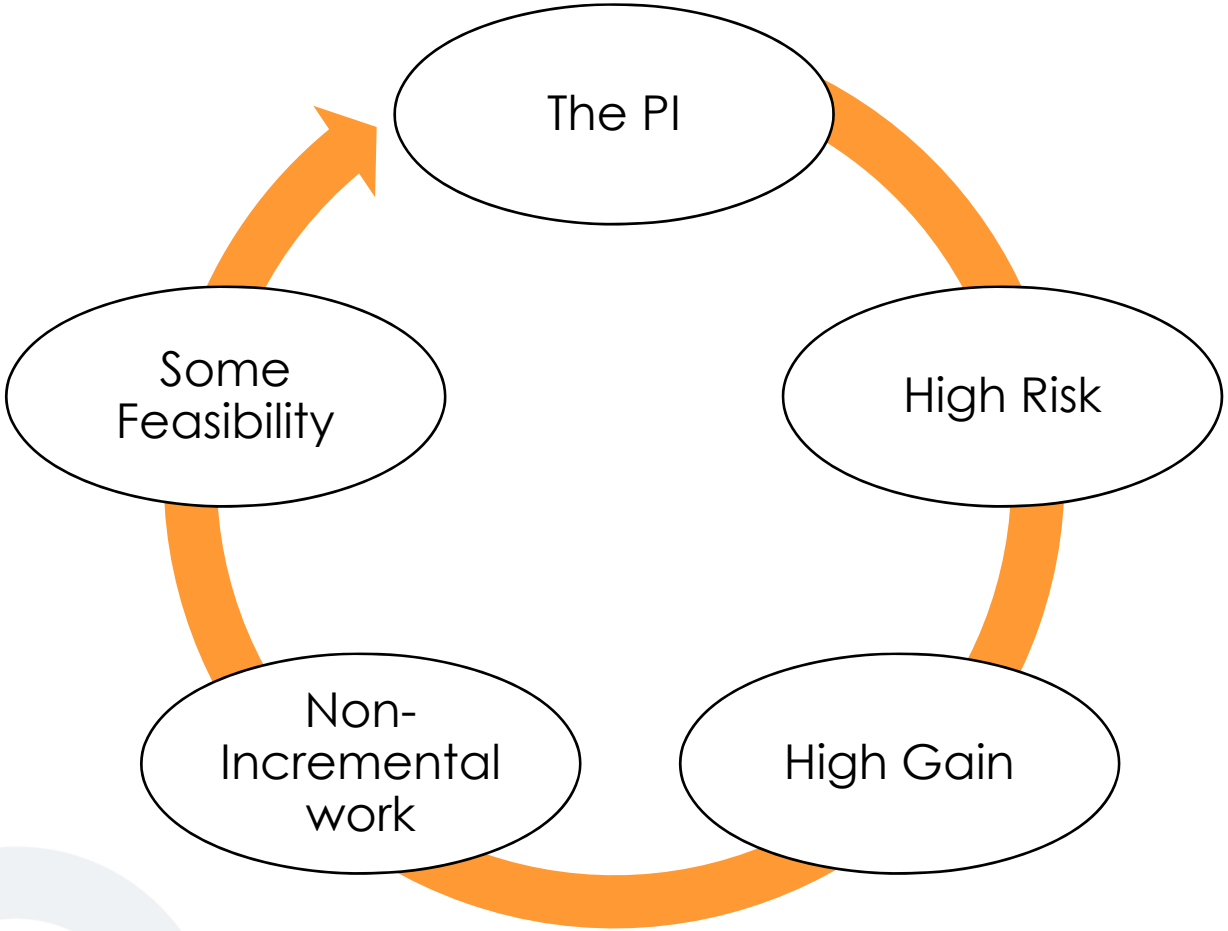
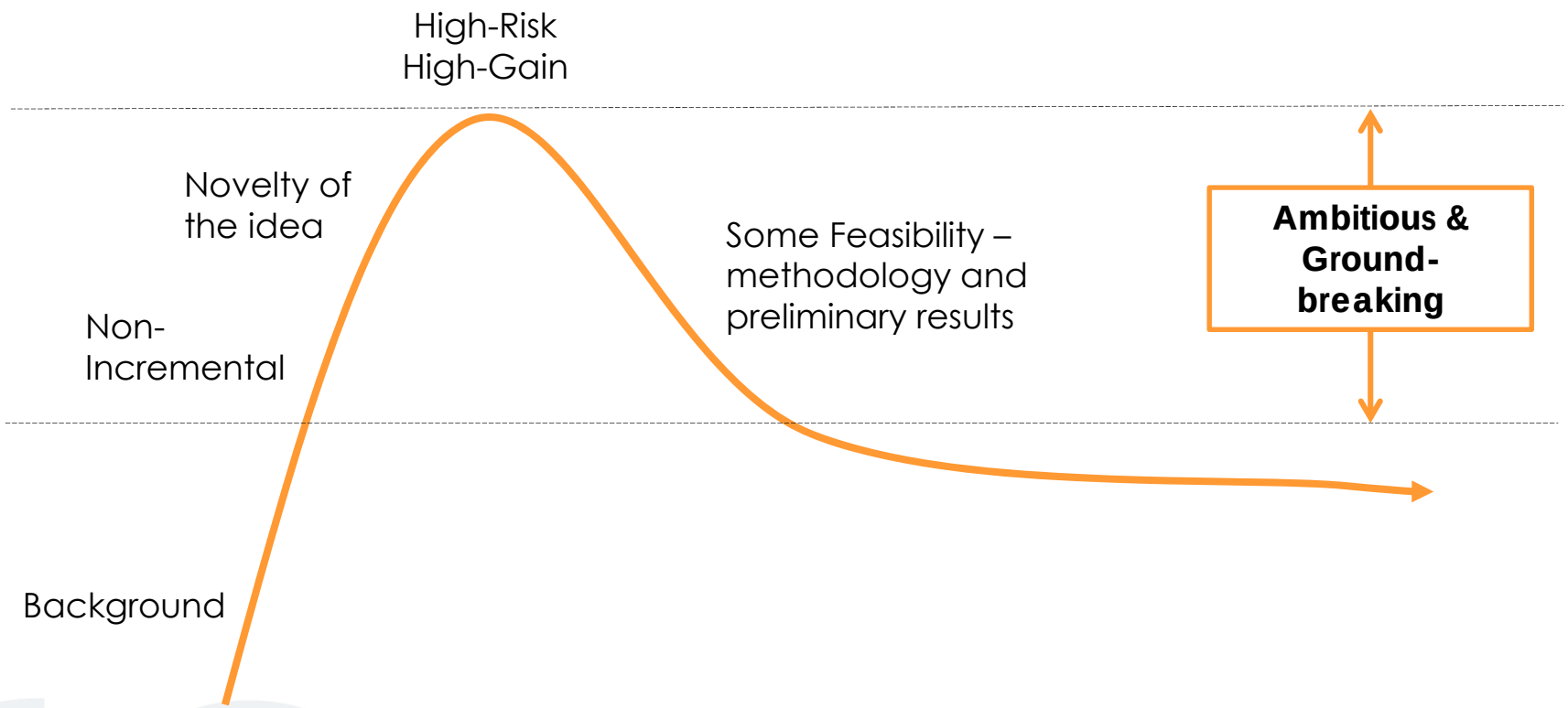
- Identify the right candidates - How to identify "ERC material"? How to decide on "Go/No-Go"?
- Understanding the uniqueness of ERC
- Awareness raising for researchers
  - ERC Info days
  - ERC Training
- Success stories
- Coaching
- Consulting (peers, NCPs, experts)
- The sooner the better

ERC WORKFLOW

THE ERC "POWER CYCLE"



ERC CONCEPT NARRATIVE



ESTABLISHING THE CONCEPT

- Hypothesis-driven Research
- High-risk, high-gain
  - Conceptual leap forward
  - Non-incremental workflow, while presenting preliminary results
  - Large scale vs. minimal impact – expanded scope over a niche research
  - Opening the horizon for future research
- Do not underestimate the 'high risk'
  - Preferably uncharted waters
  - The "Noble Prize paradox" / past breakthroughs
- Avoid 'fishing expeditions'
  - ''Something will come up, no matter what''

ESTABLISHING THE CONCEPT

- Avoid being ‘too ambitious’
  - ‘Not able to carry out the work’
  - Feasibility aspect – avoid ‘hand waving’, not bringing it down to earth
- Novel subject, novel methodology or both
  - Avoid basing on integration and/or optimization of existing theories, technologies, methodologies or tools
- Does it hold a 5 year research plan ?
- Comprehensive but not fragmented
  - Avoid stand-alone sub-projects/studies (both in concept and presentation)

ESTABLISHING THE CONCEPT

- Is the concept within the core expertise of the PI?
  - Will a dramatic change of infrastructure be needed? (e.g. computational biology to "wet" lab, theory to experimental)
- Some feasibility – Keep the fine balance
  - Present preliminary results that do not diminish the high-risk
  - Provide a ***Limited*** risk-assessment and contingency plan
- Present a macro-level work plan
  - Overall timeline and research phases
  - Avoid "WP structure" and deliverables
- Does it have an "open end"?
  - "Closed end" vs. open the horizon for more research
  - Too applicative: culminates into a PoC/demonstration (WPs) → Consider FET-Open / other H2020 opportunities

THE ERC - FET-OPEN PATH

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ERC

FET Open

Fast Track to Innovation

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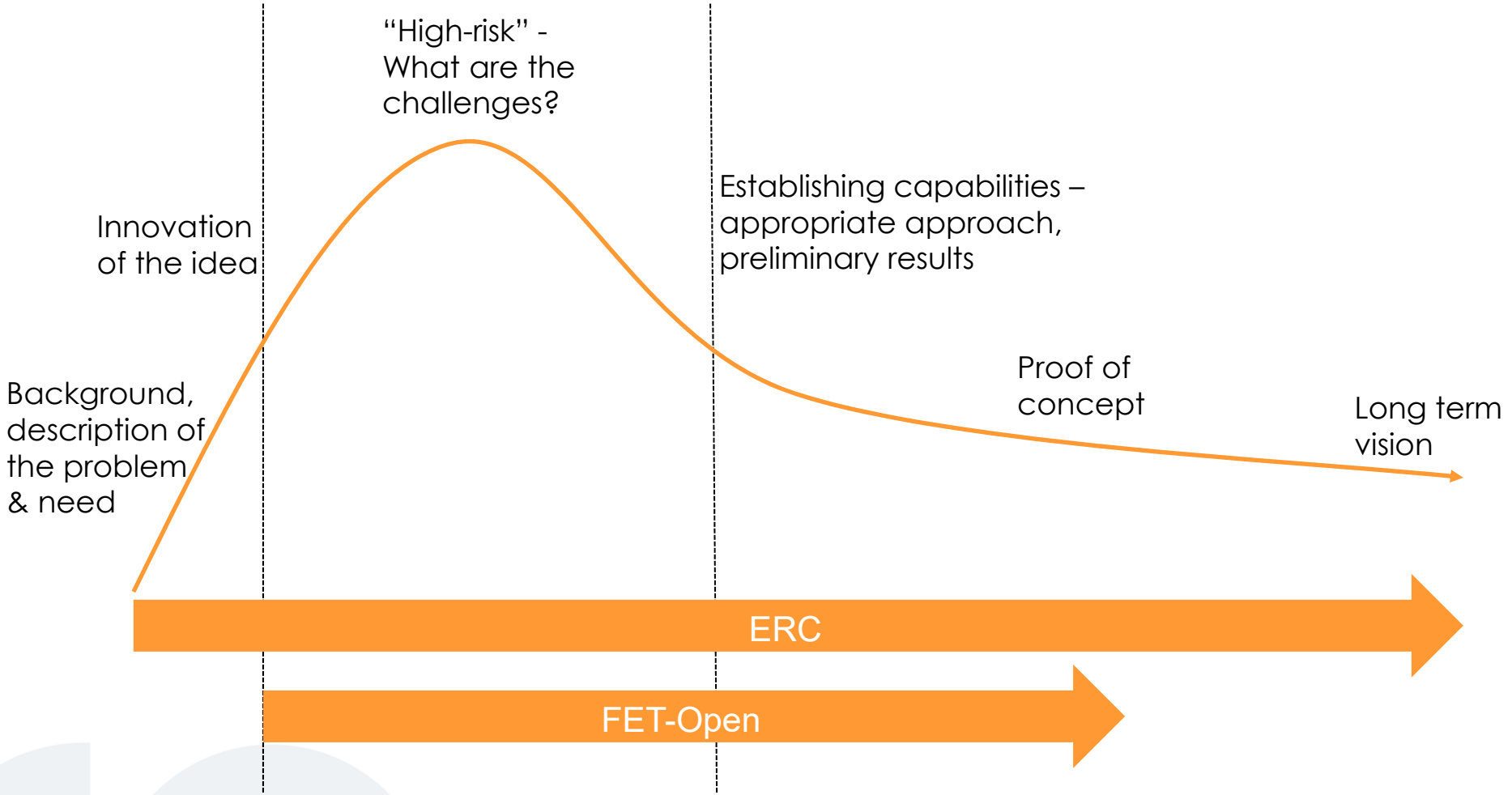
Technology Readiness Level (TRL)

THE ERC - FET-OPEN PATH



ESR KEY CRITICISM - NOVELTY

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- ''The proposal fails to go beyond the SotA in the field"
- "The proposal presents incremental work rather than opening a new research path"
- ''The risks involved seem moderate''
- ''the theoretical formulation of the proposal was still insufficiently developed, remaining somewhat vague''
- ''one cannot really see what the project might contribute that is ground-breaking or that will expand in a significant way what we already know''
- "The suggested impact seems rather low''
- ''the reach of the project looks more like the sort of project that would better justify a book by the PI''

What to do…

- Clarify the potential major breakthroughs, originality and creativity of the project
- Explain why the project is high-risk, high-gain
- Focus on the planned research rather than what you have done so far
- Emphasise the gap between the proposed project and the SotA

ESR KEY CRITICISM - FEASIBILITY

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- ''The objectives appear to be too ambitious to be feasible"
- ''The risks clearly outweigh any gains to be obtained from the project"
- ''The scope of the project is unrealistic''
- ''The proposal requires greater clarity and specification"
- ''The potential challenges are not described in detail''
- ''The proposal is feasible but does not seem high risk or high gain"
- ''A more interdisciplinary approach may be warranted here''
- ''The timescales and resources of the proposal seem unjustified''

What to do…

- Provide preliminary findings/results in the text
- Include a risk-assessment and risk mitigation measures (~1/2 page)
- Prove that the ambition level is high, but not too high
- Focus on a manageable number of objectives (~3-6)
- Include a general outline of the workplan that matches the resources (~1/2 page + high-level Gantt chart)

PANEL SELECTION

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Lead the panel selection – make sure to select the right panel/s to avoid bouncing the proposal to another panel

How to choose the panel/s?

- Mandatory: 1 Review Panel with 1 corresponding Sub-panel ("ERC keyword")
- Optional: 1 additional Review Panel, and up to 3 additional ERC keywords
- The primary review panel will probably manage the evaluation process
- The panelists have the mandate to bounce the proposal to another panel

What to consider?

- Who will appreciate the PI (CV) and his/her novelty?
- Who understands the PI's language/terminology?
- Will the PI feel comfortable to present to these people in the interview (StG/CoG)?
- Does the PI need more than one panel? How interdisciplinary is she/he?

PANEL SELECTION

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Primary Review Panel Structure

Physical Sciences & Engineering

PE1 Mathematics
All areas of mathematics, pure and applied, plus mathematical fou
science, mathematical physics and statistics.

PE2 Fundamental Constituents of Matter
Particle, nuclear, plasma, atomic, molecular, gas, and optical physics.

PE3 Condensed Matter Physics
Structure, electronic properties, fluids, nanosciences, biophysics.

PE4 Physical and Analytical Chemical Sciences
Analytical chemistry, chemical theory, physical chemistry/chemical ph

PE5 Synthetic Chemistry and Materials
Materials synthesis, structure-properties relations, functional an
molecular architecture, organic chemistry.

PE6 Computer Science and Informatics
Informatics and information systems, computer science, scientific
systems.

PE7 Systems and Communication Engineering
Electrical, electronic, communication, optical and systems engineering

PE8 Products and Processes Engineering
Product design, process design and control, construction methods, c
processes, material engineering.

PE9 Universe Sciences
Astro-physics/chemistry/biology; solar system; stellar, galactic and e
planetary systems, cosmology, space science, instrumentation.

PE10 Earth System Science
Physical geography, geology, geophysics, atmospheric sciences, ocea
cryology, ecology, global environmental change, biogeochemical cy
management.

Life Sciences

LS1 Molecular and Structural Biology and Biochemistry
Molecular synthesis, modification and interaction, biochemistry, biophysics, structural biology, metabolism, signal transduction.

LS2 Genetics, Genomics, Bioinformatics and Systems Biology
Molecular and population genetics, genomics, transcriptomics, proteomics, metabolomics, bioinformatics, computational biology, biostatistics, biological modelling and simulation, systems biology, genetic epidemiology.

LS3 Cellular and Developmental Biology
Cell biology, cell physiology, signal transdu
pattern formation in plants and animals, ste

LS4 Physiology, Pathophysiology and En
Organ physiology, pathophysiology, endo
cardiovascular disease, metabolic syndrome

LS5 Neurosciences and Neural Disorders
Neurobiology, neuroanatomy, neurophys
neuroimaging, systems neuroscience, neuro

LS6 Immunity and Infection
The immune system and related disorders, treatment of infection.

LS7 Diagnostic Tools, Therapies and Pub
Aetiology, diagnosis and treatment of disea
clinical medicine, regenerative medicine, me

LS8 Evolutionary, Population and Enviro
Evolution, ecology, animal behaviour, popul
biology, eco-toxicology, microbial ecology.

LS9 Applied Life Sciences and Non-Medi
Applied plant and animal sciences, food s
non-medical biotechnologies, bioengineerir
bioremediation.

Social Sciences & Humanities

SH1 Individuals, Markets and Organisations
Economics, finance and management.

SH2 Institutions, Values, Environment and Space
Political science, law, sustainability science, geography, regional studies and planning.

SH3 The Social World, Diversity, Population
Sociology, social psychology, demography, education, communication.

SH4 The Human Mind and Its Complexity
Cognitive science, psychology, linguistics, philosophy of mind.

SH5 Cultures and Cultural Production
Literature, philology, cultural studies, anthropology, study of the arts, philosophy.

SH6 The Study of the Human Past
Archaeology and history.

PANEL SELECTION

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Secondary Review Panels

processing (e.g. speech, image, video)
PE6_12 Scientific computing, simulation and modelling tools
PE6_13 Bioinformatics, biocomputing, and DNA and molecular computation

PE7 Systems and Communication Engineering: Electrical, ele and systems engineering
PE7_1 Control engineering
PE7_2 Electrical engineering: power components and/or system
PE7_3 Simulation engineering and modelling
PE7_4 (Micro and nano) systems engineering
PE7_5 (Micro and nano) electronic, optoelectronic and photoni
PE7_6 Communication technology, high-frequency technology
PE7_7 Signal processing
PE7_8 Networks (communication networks, sensor networks, n
PE7_9 Man-machine-interfaces
PE7_10 Robotics
PE7_11 Components and systems for applications (in e.g. medici
PE7_12 Electrical energy production, distribution, application

PE8 Products and Processes Engineering: Product design, construction methods, civil engineering, energy processes, material e
PE8_1 Aerospace engineering
PE8_2 Chemical engineering, technical chemistry
PE8_3 Civil engineering, architecture, maritime/hydraulic engin treatment
PE8_4 Computational engineering
PE8_5 Fluid mechanics, hydraulic-, turbo-, and piston engines
PE8_6 Energy processes engineering
PE8_7 Mechanical and manufacturing engineering (shaping, mo
PE8_8 Materials engineering (metals, ceramics, polymers, comp
PE8_9 Production technology, process engineering
PE8_10 Industrial design (product design, ergonomics, man-mach
PE8_11 Sustainable design (for recycling, for environment, eco-d
PE8_12 Lightweight construction, textile technology
PE8_13 Industrial bioengineering

PE9 Universe Sciences: Astro-physics/chemistry/biology; solar extragalactic astronomy, planetary systems, cosmology, space science
PE9_1 Solar and interplanetary physics
PE9_2 Planetary systems sciences
PE9_3 Interstellar medium
PE9_4 Formation of stars and planets
PE9_5 Astrobiology
PE9_6 Stars and stellar systems
PE9_7 The Galaxy
PE9_8 Formation and evolution of galaxies
PE9_9 Clusters of galaxies and large scale structures
PE9_10 High energy and particles astronomy – X-rays, cosmic ray

LS2 Genetics, Genomics, Bioinformatics and Systems Biology: Molecular and population genetics, genomics, transcriptomics, proteomics, metabolomics, bioinformatics, computational biology, biostatistics, biological modelling and simulation, systems biology, genetic epidemiology
LS2_1 Genomics, comparative genomics, functional genomics
LS2_2 Transcriptomics
LS2_3 Proteomics
LS2_4 Metabolomics
LS2_5 Glycomics
LS2_6 Molecular genetics, reverse genetics and RNAi
LS2_7 Quantitative genetics
LS2_8 Epigenetics and gene regulation
LS2_9 Genetic epidemiology
LS2_10 Bioinformatics
LS2_11 Computational biology
LS2_12 Biostatistics
LS2_13 Systems biology
LS2_14 Biological systems analysis, modelling and simulation

LS3 Cellular and Developmental Biology: Cell biology, cell p organogenesis, developmental genetics, pattern formation in plants ar
LS3_1 Morphology and functional imaging of cells
LS3_2 Cell biology and molecular transport mechanisms
LS3_3 Cell cycle and division
LS3_4 Apoptosis
LS3_5 Cell differentiation, physiology and dynamics
LS3_6 Organelle biology
LS3_7 Cell signalling and cellular interactions
LS3_8 Signal transduction
LS3_9 Development, developmental genetics, pattern formation animals
LS3_10 Development, developmental genetics, pattern formation
LS3_11 Cell genetics
LS3_12 Stem cell biology

LS4 Physiology, Pathophysiology and Endocrinology: Organ endocrinology, metabolism, ageing, tumorigenesis, cardiovascular dise
LS4_1 Organ physiology and pathophysiology
LS4_2 Comparative physiology and pathophysiology
LS4_3 Endocrinology
LS4_4 Ageing
LS4_5 Metabolism, biological basis of metabolism related disord
LS4_6 Cancer and its biological basis
LS4_7 Cardiovascular diseases
LS4_8 Non-communicable diseases (except for neural/psychiatri metabolism-related disorders, cancer and cardiovascular

SH1 Individuals, Markets and Organisations: Economics, finance and management
SH1_1 Macroeconomics; monetary economics; economic growth
SH1_2 International trade; international business; international management; spatial economics
SH1_3 Development economics, health economics, education economics
SH1_4 Financial economics; banking; corporate finance; international finance; accounting; auditing; insurance
SH1_5 Labour and demographic economics; human resource management
SH1_6 Econometrics; operations research
SH1_7 Behavioural economics; experimental economics; neuro-economics
SH1_8 Microeconomics; game theory
SH1_9 Industrial organisation; strategy; entrepreneurship
SH1_10 Management; marketing; organisational behaviour; operations management
SH1_11 Technological change, innovation, research & development
SH1_12 Agricultural economics; energy economics; environmental economics
SH1_13 Public economics; political economics; law and economics
SH1_14 Quantitative economic history; institutional economics; economic systems

SH2 Institutions, Values, Environment and Space: Political science, law, sustainability science, geography, regional studies and planning
SH2_1 Political systems, governance
SH2_2 Democratisation and social movements
SH2_3 Conflict resolution, war
SH2_4 Legal studies, constitutions, human rights, comparative law
SH2_5 International relations, global and transnational governance
SH2_6 Sustainability sciences, environment and resources
SH6_7 Environmental and climate change, societal impact and policy
SH2_8 Energy, transportation and mobility
SH2_9 Urban, regional and rural studies
SH2_10 Land use and regional planning
SH2_11 Human, economic and social geography
SH2_12 GIS, spatial analysis; big data in political, geographical and legal studies

SH3 The Social World, Diversity, Population: Sociology, social psychology, demography, education, communication
SH3_1 Social structure, social mobility
SH3_2 Inequalities, discrimination, prejudice, aggression and violence, antisocial behaviour
SH3_3 Social integration, exclusion, prosocial behaviour

PANEL SELECTION

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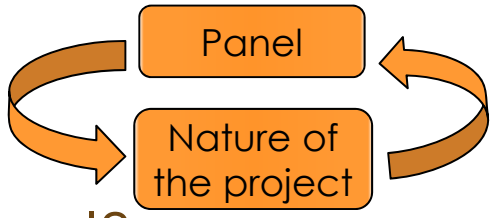
- The reciprocal effect of the panel and proposal
  - The panels are a given
  - Outsmart the (panels') constraints
  - What leads what? the panel or the proposal?
  - It is highly case-specific



- Keep the reviewers' background in mind
  - Adjust terminology accordingly
  - Excite them
  - If needed, state the obvious
  - Explicitly write the high risk / high gain
  - Be consistent throughout the proposal (B1+B2)

ADJUST THE APPLICATION

- Help the panel members to select the best reviewers - abstract and "ERC keywords" are key
- Add free keywords
- Clearly justify multiple review panel choices
  - Dedicate time to clearly articulate this, phrase with care
  - Do not leave this to last minute
  - Do not exceed the 1,000 characters limit
  - Explain shortcoming of one panel compared to the other

TYPICAL PIT FALLS

- The feasibility ‘catch 22’
- Writing ERC like other grants
- In ERC you cannot kill 2 birds with 1 stone
- (Not) being crystal clear
- ‘’But is it an ERC??’’

Training & Support are key!

ERC WORKFLOW

EVALUATION CRITERIA

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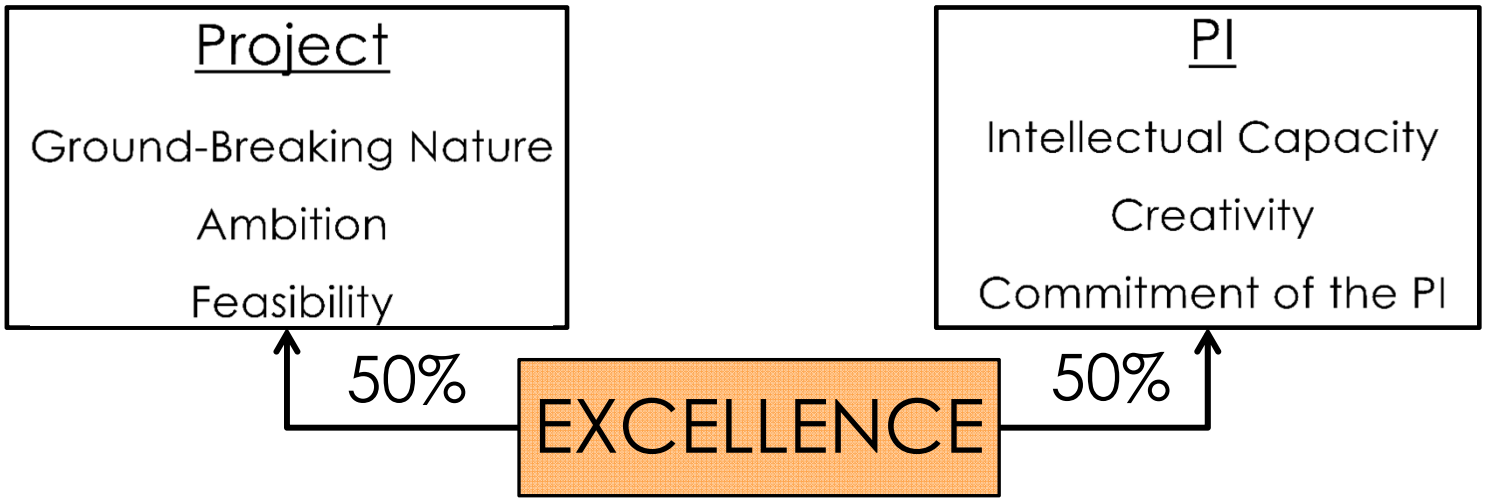
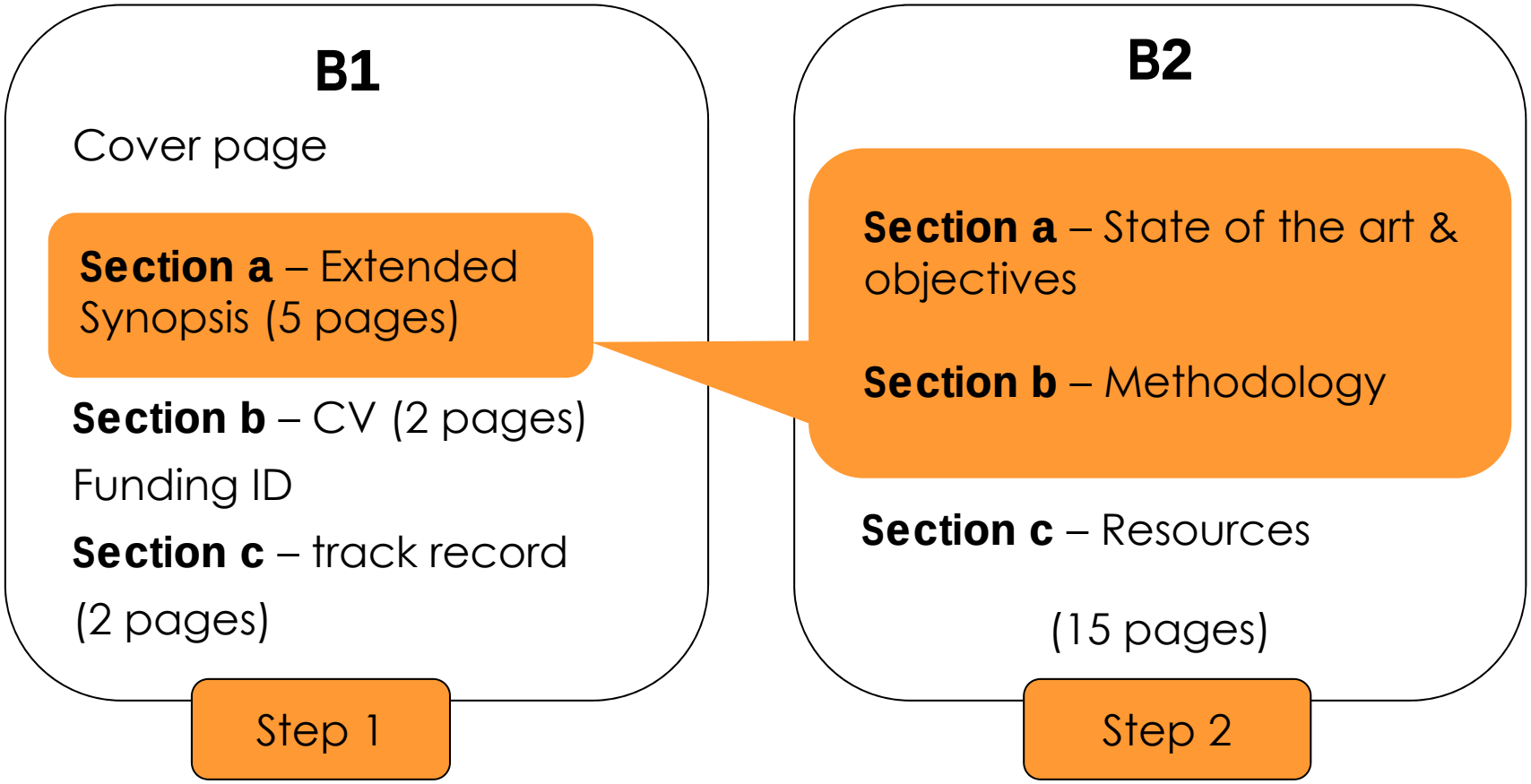


- Addresses important challenges
- Ambitious objectives beyond SotA, non-incremental work
- High risk / High gain
- Feasibility vs. High risk
- Methodology appropriate to achieve goals
- Novel methodology
- Timescales & resources - necessary & justified

- PI's ability to propose & conduct ground-breaking research
- PI's creative independent thinking
- PI's achievements typically go beyond SotA
- PI's leadership in training & advancement of young scientists
- PI's level of commitment (%)

THE APPLICATION



- B1 should stand alone - all essential information must be covered in the synopsis
- Avoid cross-references between B1 and B2
- Identical text, figures or references in both B1 and B2?
- References are NOT included within the page limits

ERC PROPOSAL WRITING TRAINING

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- On top of the typical grant writing training
- Understanding the uniqueness of ERC
- Concept forming & crystallization
- High risk – high gain
- Non-incremental research
- Do's & Don'ts
- Lessons learnt

ERC WORKFLOW

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PART A

1- General information

- Title / acronym / duration
- Primary Review Panel / Secondary Panel
- Keywords
- Abstract

2- Administrative data

- PI & Host Institution

3- Budget

- Only bottom line

4- Ethics issues table

5- Call specific questions

- Extension of eligibility window
- Excluded reviewers

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General

- Avoid redundancies and repetitions in the text
- Conform to the templates
  - Avoid outdated templates – slight changes may occur from deadline to deadline
  - Do not exceed page limits, font size, margins
  - Use template tables for Funding ID and budget
- PI's dedication to the project according to category
- Funding ID – ongoing and pending grants only
  - Past grants - listed in track record / CV
- Keep copies of all application documents for backup, during the process

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ECAS

- Missing details
  - PhD award date (AdG)
- Mistakes & mix-ups
  - Abstract is different than in B1 (should be identical)
  - Uploading a draft file with comments / tracked changes
  - Uploading a file to the wrong category (e.g. B2 instead of B1)
  - Page no. references in ethics issues table do not match pages in B2
- Missing documents
  - Forgot ethics issues annex
  - Forgot diploma scan (StG/CoG)
  - Forgot supporting documents for eligibility window extension (children's birth certificates, etc.)

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Budget

- Justification is key
- Correlate PI dedication to PI labour cost
  - Pre-Award: might generate a comment by the evaluators
  - Post-Award: internal/external audit concerns
- Equipment
  - Must be appropriate to the project's tasks
  - This is not an infrastructure grant
  - Do not exploit the 'extra' equipment budget before exhausting the 'regular' possible grant
- Subcontracting – generally not recommended, except for:
  - Institutional regulations
  - Well justified complementary marginal work
- The PI must be able to justify the budget during the interview (StG/CoG)

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Post-award budget flexibility

- Budget plan: high-level cost categories
- No one expects an accurate budget plan for 6 years ahead
- The challenge – inaccurate estimation of costs:
  - Equipment, consumables and travel
  - Collaborations
  - Sub-contracting
- Justification enables flexibility
- Personnel cost is the best 'safe harbour', but not the only one

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Budget table

Cost Category			Total in Euro
Direct Costs[1]	Personnel	PI[2]	
		Senior Staff	
		Postdocs	
		Students	
		Other	
	i. Total Direct costs for Personnel (in Euro)		
	Travel		
	Equipment		
	Other goods and services	Consumables	
		Publications (including Open Access fees), etc.	
		Other (please specify)	
	ii. Total Other Direct Costs (in Euro)		
A – Total Direct Costs (i + ii) (in Euro)			
B – Indirect Costs (overheads) 25% of Direct Costs[3] **(in Euro)**			
C1 – Subcontracting Costs (no overheads) **(in Euro)**			
C2 – Other Direct Costs with no overheads[4] (in Euro)			
Total Estimated Eligible Costs (A + B + C) (in Euro)[5]			
Total Requested EU Contribution (in Euro)[5]			

Request for additional funding above EUR 2 500 000 for	Justification
Keep only that category(ies) that apply to the project. (a) covering eligible 'start-up' costs for a PI moving from another country to the EU or an Associated Country as a consequence of receiving an ERC grant and/or, (b) the purchase of major equipment and/or, (c) access to large facilities.	

* Presented only in B2

Annexes

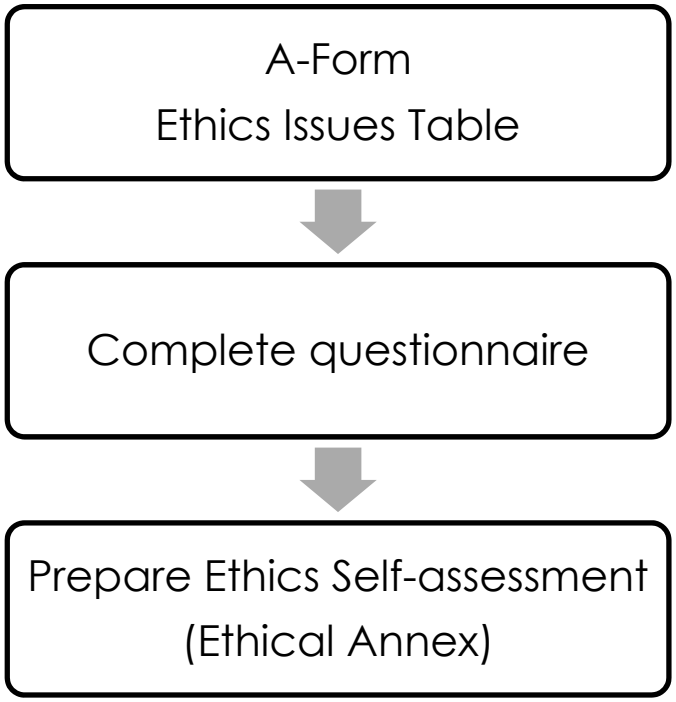
- Host support letter - originally signed, stamped and dated by the host institution's legal representative
- Scanned PhD diploma (StG & CoG)
- Ethical issues annex
- Other relevant documents:

  (e.g. Children's birth certificates)

* All submitted docs should be in an EU official language – otherwise translation is required

ETHICAL ISSUES

- Required in case of any ethical issue related to the project
- No ethical committee's approval necessary <u>for submission</u>
- Evaluated after the application passes the 2nd stage



Ethical self-assessment – examples

Humans

- Which humans are involved?
  - *vulnerable persons*
  - *persons unable to give consent*
  - *Children*
- Are some interventions on the body foreseen?
  - *invasive techniques (biopsy, EEG, fMRI)*
  - *Patients? Healthy volunteers?*
- Which are the procedures for recruitment and consent?
- Documents to provide
  - *ethics authorisations*
  - *information and consent forms*

Data Protection

- Which data?
  - *genetic data*
  - *sensitive data (health, political or religious opinions, sexual orientation, etc.)*
- Which procedure?
  - *procedure for collection – how, by whom, information on rights, info and consent forms, anonymisation*
  - *procedure for protection of data – how it is protected, encrypted, where, for how long?*
- Documents to provide
  - *data protection officer/authority authorisations*
  - *information and consent forms*
  - *security measures*

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Ethical self-assessment – examples

Cells and Tissues

- What type?
  - *hESCs*
  - *foetal cells/tissues*
  - *use or creation of cells/cells lines*
- What for?
  - *justification of use*
  - *origin: direct collection/ biobanks /secondary use*
- Documents to provide
  - *ethics authorisations*
  - *information and consent forms*
  - *justification of right for secondary use*

Animals

- Which animals are involved?
  - *vertebrates*
  - *GMOs*
  - *Primates*
  - *wild / protected animals*
- For what use?
  - *Justification for choice of species*
  - *3Rs, precise evaluation of number*
  - *Description of procedure, husbandry, anaesthesia, euthanasia*
  - *applicable legislation*
- Documents to provide
  - *ethics authorisations / project license*
  - *personal and laboratory licenses*

Ethical self-assessment – examples

Non EU countries

- Which countries?
  - *associated countries, low income, others?*
  - *to do what with? Whom with?*
- Export/import of ressources?
  - *which sources (including data)?*
  - *export/import from/to EU*
- Benefit sharing measures for low income countries
- Documents to provide
  - *National and local ethics authorisations*
  - *Authorisations for import/export*
  - *Contact with local researchers/local authorities*

  BUT, if politically sensitive research there can be exceptions

Misuse and Security

- Which threats?
  - *health for team and/or society*
  - *misuse risks/ terrorist abuse*
  - *dual use*
  - *threats on human rights*
- What for?
  - *Justification*
- Documents to provide
  - *ethics authorisations*
  - *mitigation measures*
  - *balance of rights*

Ethical self-assessment – examples

Environment Protection

- Is the project taking place in sensitive areas?
- Is the project using/collecting protected elements?
  - *oceans – Directive on Oceans?*
  - *natural areas – Directive Habitat?*
  - *areas with endangered/protected species – Directive on birds, CITES convention?*
- What for?
  - *justification*
  - *measures to minimize impact*
  - *benefit of the research to the environment*
- Documents to provide
  - *ethics authorisations*
  - *specific zone authorisations*

LAST MINUTE ERRORS

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Examples…

- Poorly scanned host support letter
- PI name / acronym / title do not match host support letter
- Different acronym / title throughout the proposal (in parts A and B)
- Budget inconsistencies in B2 and part A, missing justifications
- Formatting bugs in the Word document / template
- Low-resolution figures
- Bugs when converting to PDF (typically figures and formulas)
- Mac OS vs. PC Windows; Microsoft Word vs. Latex vs. Open Office
- Template instructions / track changes leftovers in B1 and B2
- Missing panel selection justification in B1 cover page

THE EVALUATION BLACKBOX

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- How close are the reviewers to my area? How can they evaluate my research?
  - 2 groups of reviewers: perfect match (positive/negative) & non-perfect match
  - Attend to both groups when writing the proposal
- Suitability of the host institution – not evaluated as in the past
- How many reviewers will evaluate my application?
- Shall I exclude reviewers?
- Relation to previously submitted applications – does the 'system' remember me?
- Shall I cut down the budget to be more competitive?
- Can I convey new information to the reviewers?

ERC WORKFLOW

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PREPARING FOR THE INTERVIEW

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- Who will be there? Panel selection – prepare accordingly
- Mind the specific interview instructions
- 2nd stage evaluation results are already set at the time of the interview
- The interview is not like presenting in a conference / teaching
- The challenge - to summarize the project into a 5-12 minutes presentation
- Convey the message - 'Why me? Why now?'

- Prepare, Consult, Rehearse

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Unexpected scenarios…

- The 'waiting room' syndrome
- Delays in the interview agenda
- Power outage, interruptions
- Videos do not play
- The panelist that does not like you
- Questions you cannot answer
- Highly technical / marginal questions

ESR INPUT & RESUBMISSION

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- ESR comments
  - Group 1: highly important
  - Group 2: nice to have
  - Group 3: irrelevant / unexplained / unjustified / personal
- Determine if there is a "show stopper"
- Resubmit does not mean "copy & paste"
- Re-visit:
  - Scientific concept and presentation
  - Eligibility window
  - Publications and track record
  - Templates

FINAL NOTES

- ERC awareness and training are key for success
- The sooner, the better – let the proposal mature (~2-3 months before deadline) and avoid last minute issues
- No application is identical
- Encourage applicants to consult with **experienced** peers (i.e. ERC awardees or panel members) and ERC professionals

TAKE HOME MESSAGE

ERC is not the typical national grant –

it deserves a dedicated process

and special attention

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